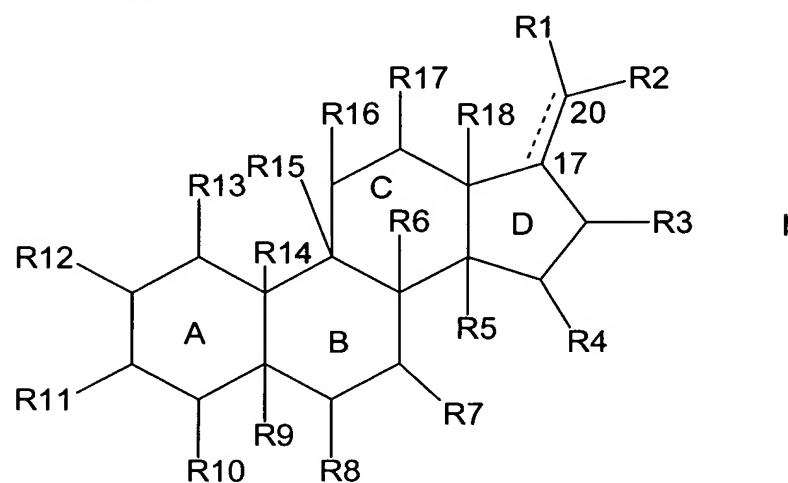


## Branched Polyamine Steroid Derivatives

## ABSTRACT

- 5 Novel compounds comprising a steroid backbone coupled to a branched polyamine according to formula I



- are provided. The compounds show antimicrobial activity and may be used in the treatment  
10 and prevention of infections, in particular bacterial infections.

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

CORRECTED VERSION

10/509911

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
23 October 2003 (23.10.2003)

PCT

(10) International Publication Number  
WO 2003/087121 A1

(51) International Patent Classification<sup>7</sup>: C07J 41/00, A61K 31/57, A61P 31/04

(21) International Application Number:  
PCT/DK2003/000220

(22) International Filing Date: 4 April 2003 (04.04.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/369,864 5 April 2002 (05.04.2002) US

(71) Applicant (for all designated States except US): LEO PHARMA A/S [DK/DK]; Industriparken 55, DK-2750 Ballerup (DK).

(72) Inventor; and

(75) Inventor/Applicant (for US only): DUVOLD, Tore [NO/DK]; Thorvaldsensvej 21, 4.th, DK-1871 Frederiksberg C (DK).

(74) Agent: THALSØ-MADSEN, Birgit; Head of Patent Section, Leo Pharma A/S, Industriparken 55, DK-2750 Ballerup (DK).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

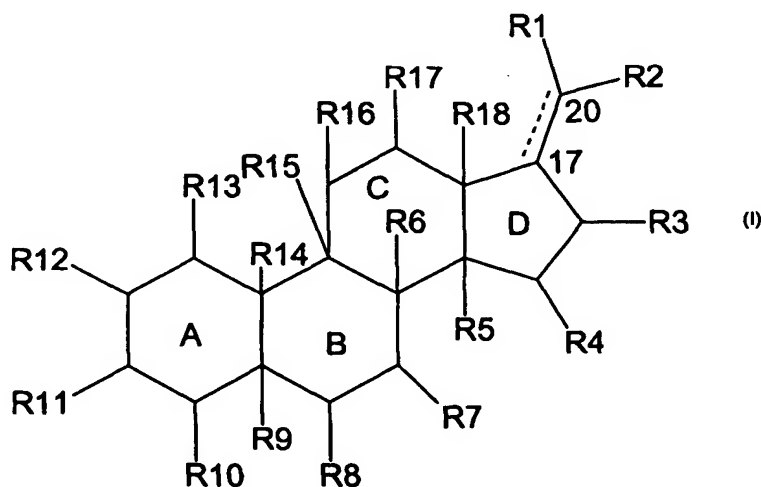
— with international search report

(48) Date of publication of this corrected version:  
8 April 2004

(15) Information about Correction:  
see PCT Gazette No. 15/2004 of 8 April 2004, Section II

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: BRANCHED POLYAMINE STEROID DERIVATIVES



(57) Abstract: Novel compounds comprising a steroid backbone coupled to a branched polyamine according to formula (I); are provided. The compounds show antimicrobial activity and may be used in the treatment and prevention of infections, in particular bacterial infections.

WO 2003/087121 A1